

CLAIMS

I Claim:

1. In a communication system, a method of transferring the floor between devices engaged in network-based instant connect communication, comprising:

in a network-based instant connect communication session, transmitting voice data from a first device that has the floor to a second device;

while the first device has the floor, responding to a floor request signal originating from the second device by transferring the floor to the second device; and

transmitting voice data from the second device to the first device while the second device has the floor.

2. The method of claim 1, wherein the floor request signal originating from the second device is generated in response to a user of the second device pressing a talk button of the second device.

3. The method of claim 1, further comprising, while the second device has the floor, responding to a floor request signal originating from the first device by transferring the floor back to the first device.

4. The method of claim 3, wherein the floor request signal originating from the first device is generated in response to a user of the first device pressing a talk button of the first device.

5. The method of claim 1, wherein the floor is transferred to the second device without the first device having relinquished the floor.

6. The method of claim 5, wherein the floor is transferred to the second device in a way that interrupts transmission of the voice data from the first device to the second device and while a user of the first device continues pressing the talk button of the first device.

7. The method of claim 1, wherein the network-based instant connect communication session is conducted as half-duplex communication in a network that also has full-duplex communication capabilities.

8. The method of claim 1, further comprising establishing the network-based instant connect communication session, including:

receiving a signal from the first device, the signal including a request to establish the network-based instant connect communication session and information identifying the second device;

granting the floor to the first device; and

receiving the voice data from the first device, the voice data being transmitted to the second device in a way that automatically activates output of the voice data from the second device without requiring input from a user of the second device.

9. The method of claim 1, wherein:

the communication system comprises a wireless network; and

the first device and the second device are mobile devices.
10. The method of claim 1, wherein:

the communication system comprises a wireline telephone network; and

the second device is a speakerphone.
11. The method of claim 1, wherein the floor request signal is generated as a user of the second device presses a talk button of the second device, the second device maintaining the floor until either the talk button of the second device is released or a subsequent floor request signal originates from the first device.
12. The method of claim 1, wherein the floor request signal is generated as a user of the second device taps a talk button of the second device, the second device maintaining the floor after the talk button of the second device is tapped until a subsequent floor request signal originates from the first device.
13. The method of claim 1, wherein the communication system includes at least a third device that communicates with the first device and the second device and receives the voice data transmitted from the second device while the second device has the floor.

14. The method of claim 1, wherein:
- floor control logic resides at a server in the communication network; and
- responding to the floor request signal originating from the second device is performed as the server receives the floor request signal.
15. The method of claim 1, wherein:
- floor control logic resides at the first device and the second device; and
- responding to the floor request signal originating from the second device is performed as the first device receives the floor request signal that has been transmitted from the second device to the first device.

16. In a communication device that operates in a communication system, a method of obtaining the floor that is allocated between devices engaged in network-based instant connect communication, comprising:

in a network-based instant connect communication session, receiving voice data from a remote device;

while the remote device has the floor, generating a floor request signal and transmitting the floor request signal to a server in the communication system;

in response to transmitting the floor request signal, obtaining the floor in the network-based instant connect communication session.

17. The method of claim 16, wherein the floor request signal is generated in response to a user of the communication device pressing a talk button of the communication device.

18. The method of claim 16, further comprising losing the floor at the communication device in response to an action taken by a user of the remote device, the floor being lost at the communication device without the user of the communication device having relinquished the floor.

19. The method of claim 18, wherein the floor is lost while the user of the communication device continues to press a talk button of the communication device.

20. The method of claim 18, wherein the action comprises the user of the remote device pressing a talk button of the remote device.

21. The method of claim 16, wherein the network-based instant connect communication session is conducted as half-duplex communication in a network that also has full-duplex communication capabilities.

22. The method of claim 16, further comprising establishing the network-based instant connect communication session, including automatically outputting the voice data at the communication device upon establishment of the network-based instant connect communication session without requiring input from a user of the second device.

23. In a communication system, a method of modifying a network-based instant connect communication session such that floor control management is not needed to communicate voice data, comprising:

establishing a network-based instant connect communication session between a first device and a second device, including:

granting the floor to the first device; and

transmitting voice data from the first device to the second device using half-duplex communication;

receiving input provided from a user of the second device in response to the establishment of the network-based instant connect communication session; and

in response to the input, transitioning the network-based instant connect communication session from half-duplex communication to full-duplex communication that permits two-way communication without requiring the floor to be granted to either the first device or the second device.

24. The method of claim 23, wherein the input comprises a talk button of the second device being pressed by the user.

25. The method of claim 24, wherein:

the second device automatically begins to output the voice data when the network-based instant connect communication session is established without requiring assistance from the user; and

the input is provided from the user after the second device automatically begins to output the voice data.

26. The method of claim 24, wherein the input is provided while the first device has the floor.

27. The method of claim 23, wherein the network-based instant connect communication session is established using a network that inherently has the capability of carrying communication on full-duplex communication channels.

28. The method of claim 23, wherein:
the communication system comprises a wireless network; and
the first device and the second device are mobile devices.

29. The method of claim 23, wherein:
the communication system comprises a wireline telephone network; and
the second device is a speakerphone.

30. In a communication device that operates in a communication system, a method initiating modification of a network-based instant connect communication session such that floor is not needed to communicate voice data, comprising:

at the establishment of the network-based instant connect communication session, outputting voice data that has been received from a remote device, wherein:

the network-based instant connect communication is conducted as half-duplex communication; and

the remote device has the floor;

transmitting, to a server in the communication system, input provided from a user of the communication device in response to the establishment of the network-based instant connect communication session, resulting in a transition of the network-based instant connect communication session from half-duplex communication to full-duplex communication that permits two-way communication without requiring the floor to be granted to either the communication device or the remote device.

31. The method of claim 30, wherein the input comprises a button of the communication device being pressed by the user.

32. The method of claim 30, wherein the input is provided while the first device has the floor.

33. The method of claim 30, wherein the network-based instant connect communication session is established using a network that inherently has the capability of carrying communication on full-duplex communication channels.

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34. In a speakerphone that operates in a telephone network, a method of obtaining the floor that is allocated between devices engaged in a telephone call comprising:

in the telephone call, receiving voice data at the speakerphone from a remote device;

while the remote device has the floor, generating a floor request signal in response to a talk button of the speakerphone being pressed; and

in response to the floor request signal, obtaining the floor at the speakerphone.

35. The method of claim 34, further comprising losing the floor at the speakerphone in response to an action taken by a user of the remote device, the floor being lost at the speakerphone without the user of the speakerphone having relinquished the floor.

36. The method of claim 34, wherein the speakerphone maintains the floor until either the talk button of the speakerphone is released or a subsequent floor request signal originates from the remote device.

37. The method of claim 34, wherein the floor request signal is generated as a user of the speakerphone taps the talk button, the speakerphone maintaining the floor after the talk button is tapped until a subsequent floor request signal originates from the remote device.